

### **WHAT'S NEW IN September**

#### **UPCOMING WEBINAR OFFERINGS**

(W= Webinar F= Face-Face)

Title	Date	Time	Cost	Туре
Constructing Explanations & Arguing from Evidence- Using	8/25/20	4:00pm – 5:00pm	FREE	W
Claims, Evidence, and Reasoning (CER)				
Constructing Explanations & Arguing from Evidence- Using	8/27/20	4:00pm – 5:00pm	FREE	W
Claims, Evidence, and Reasoning (CER)				
STEM Series: Technology Integration in STEM	9/10/20	4:00pm – 5:00pm	FREE	W
Crosscutting Concepts: 1 of the 3 Dimensions of the AZ	9/15/20	4:00pm – 5:00pm	FREE	W
Science Standards				
Science and Engineering Practices: 1 of the 3 Dimensions of	9/16/20	4:00pm – 5:00pm	FREE	W
the AZ Science Standards				
STEM Series: Computer Science Resources for the K-5	9/17/20	4:00pm – 5:00pm	FREE	W
<u>Classroom</u>				
Constructing Explanations & Arguing from Evidence- Using	9/22/20	4:00pm – 5:15pm	FREE	W
Claims, Evidence, and Reasoning (CER)				
STEM Series: Meet Computer Science Standards with Code.org	9/24/20	4:00pm – 5:00pm	FREE	W
Constructing Explanations & Arguing from Evidence- Using	9/29/20	4:00pm – 5:15pm	FREE	W
Claims, Evidence, and Reasoning (CER)				



#### **Assessment Update**

AIMS Science: "The Arizona State Board of Education took advantage of a waiver from the U.S. Department of Education to eliminate the testing of AIMS Science in the 2020-2021 school year. AIMS Science was scheduled to be administered in 4th, 8th and 10th grade for the final time before being replaced by AzSCI. Simultaneously, AzSCI was scheduled to be census field tested in 5th, 8th and 11th grade. With the action taken by the Board, schools can now focus on the new assessment, AzSCI, which is aligned to the new standards. AIMS Science is now retired."

Arizona State Board of Education virtual met 8-12-20. Highlights of the State Board Meeting

Please visit the Science Standards webpage for an updated timeline. For more assessment information, visit the ADE Assessment website.

#### **Connect Arizona**



New Wifi Map and Free Tech Support Hot Line Launches to help Arizona students access internet via open hotspots for virtual learning! Please click <u>here for the website</u> or <u>dowload the PDF</u> for more information.



#### **Arizona Virtual Teacher Institute**

ASU Prep Digital has created the *Arizona Virtual Teacher Institute* to help Arizona teachers thrive in the new reality where online instruction is a part of every school plan.

**This training is provided at no cost** to schools or teachers through the generous investment of the Arizona Department of Education, the Governor's Office, Helios Education Foundation and Arizona State University.

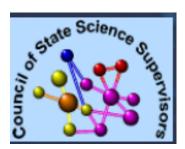
#### **ASTA Science Talks**



Arizona Science Teachers Association Science Talks. ASTA's Science Talks for the Academic Year occur the 4th Monday of each month from 4PM-5PM (excluding December). Join the Arizona Science Teachers association for an opportunity to engage in a generative conversation about successes, challenges, and resources. The importance of Science as a human endeavor is clear and staying connected during these difficult times is crucial. Engage with PreK-12 science

teachers from around Arizona. We have new topics every month. Click the Registration Link to the Right of the date. Here is a list of events for science talks: <a href="https://azsta.org/events/science-talks/">https://azsta.org/events/science-talks/</a>

### Safety Resources from the Council of State Science Supervisors



The Council of State Science Supervisors in collaboration with the National Science Education Leadership Association conducted a Lab Safety Webinar on July 30, 2020. We want to thank Dr. Ken Roy and Dr. Kevin Doyle for sharing some considerations for our safety practices for this coming school year. We have linked the recording for the presentation portion of the webinar and associated resources below. For updated guidance and considerations please refer to CDC guidance, state agency guidance, and

the NSTA's Lab Safety Page (see below).

Webinar Recording (https://www.youtube.com/watch?v=GyilhajkBg8&feature=youtu.be)

• **Note:** the slides are intellectual property and must not be duplicated, please contact Dr. Ken Roy at safersci@gmail.com for information about slides.

**National Science Teachers Association**- The National Science Teachers Association has a collection of <u>science safety resources</u>, although they are not specific for the COVID-19 situation. <u>NSTA Safety Resources</u> position statements and safety issue papers.

- Safety Recommendations for Opening the New School Year NSTA blog by Dr. Ken Roy, NSTA Safety Officer
- CDC Guidance for General Laboratory Safety Practices during the COVID-19 Pandemic focused on research and academic labs
- CDC Recommendations for Cleaning and Disinfection
- FDA Guidance on Hand Sanitizers
- Hand Sanitizers Consumers Should Not Use (Updated Regularly)

#### **STEMAZING Project**



The Pima County Superintendent Office has a project called STEMAZing! DaNel Hogan is leading this work and this project has tons of resources, professional development opportunities, and digital notebook examples! Visit the

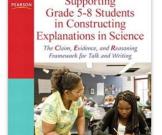
<u>STEMAZing project</u>, <u>check out the available resources</u>,or <u>register for an upcoming event!</u> You can also follow the STEMAZing project on social media & sign up for the newsletter:

Facebook: <a href="https://www.facebook.com/TheSTEMAZingPro/">https://www.facebook.com/TheSTEMAZingPro/</a>

Reasoning (CER)

Twitter: <a href="https://twitter.com/TheSTEMAZingPro">https://twitter.com/TheSTEMAZingPro</a>
Sign up for The STEMAZing Newsletter!

# \*NEW\* Webinar- Constructing Explanations & Arguing from Evidence- Using Claims, Evidence, and



Katherine L. McNeill Joseph Krajeik

This webinar will focus on discussing how the two Science and Engineering Practices of Constructing Explanations and Arguing from Evidence are connected. Together we will explore the differences between these two SEPs, dive into how they are connected, and discuss how to engage students in speaking and writing like scientists through using a strategy called "Claim, Evidence, Reasoning (CER)". Tools for scaffolding CER statements with students will also be provided! Information from this amazing resource-

Supporting Grade 5-8 Student in Constructing Explanations in Science will be used as well!

#### Webinars on the go! Watch a webinar on YOUR TIME!

# ▶ Recorded Webinars ▶ Science Standards Videos ▶ Timeline and Resources

ADE is pleased to announce that we have many new recorded webinars available for use on our main Science Standards website located *here*. Scroll down and click on the drop-down menu titled "Recorded Webinars." The webinars are now "packaged" on the website and include the video of the webinar. a PDF of

the presentation, and a resource page with links to all resources used during the live webinar!

#### Here are the new recorded webinar packages:

<u>A Look at Arizona's New Science Standards</u> | <u>PDF</u> | <u>Resource Page</u>

<u>5-E Instructional Model and Science Notebooks</u> | <u>PDF</u> | <u>Resource Page</u>

<u>Phenomenon-Based 3-Dimensional Instruction</u> | <u>PDF</u> | <u>Resource Page</u>

<u>Science and Engineering Practices</u> | <u>PDF</u> | <u>Resource</u>

#### Staying Grounded when Teaching Remote from OpenSciEd



Staying Grounded when Teaching Remote is a webinar series to support educators to stay grounded in the best practices of science teaching and learning while they shift to remote learning during school closures in response to the Covid-19

pandemic. This series focuses on routines and elements of storyline instructional models that are central to OpenSciEd, <u>inquiryHub Biology</u>, and <u>NextGen Storylines</u> materials. These webinars are a collaborative effort of the <u>University of Colorado</u>, <u>The Charles A. Dana Center at the University of Texas</u>, and <u>OpenSciEd</u>. OpenSciEd also developed a <u>Remote Learning Online Tool Organizer</u>, is a list of online tools generated by teachers using OpenSciEd and inquiryHub materials in their classrooms. This tool ties the tools to their use within the storyline instructional model.

#### **OpenSciEd- 3 Discussion Types**



OpenSciEd units use specific types of discussions to help draw out student ideas, support students in communicating with one another in scientific ways, and support student sensemaking. These different types of discussion serve different purposes,

are useful in different phases of a lesson or unit, and have different characteristics depending on their purpose. If you are interested in additional resources that correlate to these three discussion types, check out the <a href="OpenSciEd Teacher Handbook">OpenSciEd Teacher Handbook</a>.



### How I'm Teaching Remotely from Paul Anderson

Paul Andersen describes how he is teaching remotely in both conferences and classrooms. He tries to focus on good pedagogy rather than technology. The main topics include Whole Class Instruction, Science Investigations, Student Feedback and Small Group Work. Click this link to watch this video!

## 3-D Assessment Design with Paul Anderson, The Wonder of Science & STEM Teaching Tools

If you are interested in learning more about how to design 3-dimensional assessments, here are a few great resources to get you started. STEM Teaching Tool #29 describes the steps for designing a three dimensional assessment and STEM Teaching Tool #34 focuses on designing an assessment system that measures three-dimensional science leanning. Paul Anderson's site, The Wonder of Science, also has a few tools to help educators new to 3-dimensional assessment design. The first resource helps educators understand a simple 3-step process for designing assessment and another great resource describes how to use an assessment screening tool to review possible assessments for use.

## 5 Non-negotiables in Your Science Classroom (even if you have to teach remotely)



is a quick read, but full of great information! <u>This article discusses 5</u> non-negotiables in your sciece classroom for both in-person and remote leanning. Simple ideas like connecting to kids, instill wonder, teaching critical thinking skills, be real, and have fun!!!

Something useful for everyone to hear in here!

# \*NEW\* 3-Dimensional Middle School Science Units Developed by Arizona Educators!!!



Arizona Science Teachers Associastions' (ASTA) *A Deeper Dive:*Constructing 3-dimensional Units was a partnership with Arizona

Department of Education (ADE) and BSCS Science Learning (BSCS) financially supported by APS Foundation.

The Five Tools is a set of tools and processes to support educators to translate science concepts, practices and performance expectations into multiple instructional sequences that form an Arizona Science Standards

(AzSS) unit, create an in-depth plan for one instructional sequence and assessment task, and provide an in-depth professional learning experience focused on the 3-dimensions. Click here to find all the Middle School science units that were developed!

#### What is the difference between AzSS and NGSS?



Wondering what aspects are the same or different? If so, then take a look at our two new science standards videos. This is a two-part video series. **Part 1** was designed to explain the similarities and differences between the NEW Arizona Science Standards that were adopted in October of 2018 and the Next Generation Science Standards. **Part 2** of this video series was designed to dig a little bit deeper into the similarities and differences between these two sets of standards by doing a side-by-side

comparison of an NGSS standard and an Arizona science standard.

### \*NEW\* Complete Set K-12 Summaries that Compare the AzSS to NGSS

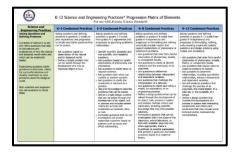


A new addition, a <u>complete set for K-12</u> combined into one document! Curious to know how each of the new Arizona Science Standards (AzSS) compares to the Next Generation Science Standards (NGSS)? The ADE, with the help of our Educator Leadership Team, created a new document called "Arizona's 2018 Science Standards Summary and AzSS vs. NGSS Planning Guide". These documents describe if the Next Generation Science Standards have a "strong," "partial," or "no correlation" to the

Arizona Science Standards. This planning summary and guide can help districts and educators find resources, plan lessons, and understand more deeply how Arizona Science Standards compare to the national standards. Here are the documents for each grade level, and you can also <u>visit our website</u> and click "Planning Tools" to find these documents.

<u>Kindergarten</u> | <u>First Grade</u> | <u>Second Grade</u> | <u>Third Grade</u> | <u>Fourth Grade</u> | <u>Fifth Grade</u> | <u>Sixth Grade</u> | <u>Sixth Grade</u> | <u>Fighth Gra</u>

### 3 Vertical Progression Documents – One for each of the 3 Dimensions!



Did you know? ADE's science standards website has three documents that can help educators plan for 3-dimensional science instruction. The first document is the *Vertical Alignment Progression of Knowing Science* that describes how the standards spiral from Kindergarten through Twelfth Grade. The second document is called the *K-12 Crosscutting Concepts Progression Matrix of Elements* that describes specific targets for each grade

band in relation to each of the seven crosscutting concepts. The third document is the *K-12 Science* and Engineering Practices Progression Matrix of Elements that includes descriptors of what students should be able to do in regards to the Science and Engineering Practices in each grade band.



#### **Code.org's Back to School Information**

Code.org has put together a <u>list of recent curriculum updates</u>, including <u>support for online and socially-distanced learning</u> (for example, using Code.org in <u>online learning management systems</u>). Their team has created resources for parents, teachers, school districts, and administrators to facilitate learning computer science this fall, regardless of the school building's opening status. And, you can find more information on district plans for reopening across the nation on this map from MCH Data here.

# Arizona Virtual Computer Science Summer Professional Development

The <u>Computer Science Teachers Association of Arizona</u> (CSTA-AZ) is excited to announce a menu of Virtual Professional Development experiences over the summer for K-12 educators. Many of these sessions are *free* or have scholarships & funding available, such as through the *Arizona Department* of *Education CSPD Fund*. All courses apply towards the new Arizona Computer Science Teaching Endorsements for *K-8* and *6-12*.

We have confirmed summer sessions from Code.org, Oracle Academy, BootUp P.D., Girls Who Code, the Carnegie Melon C.S. Academy, and the National Center for Computer Science Education. Detailed information about summer sessions can be found on the *CSTAArizona website*.

### Computer Science Implementation Guidance Document and Endorsement

Arizona released K-12 Computer Science Standards in October 2018 and two options for Computer



Science endorsement for K-12 teachers. To support the implementation of these standards, we are excited to present a *Computer Science Implementation Guidance document.* The primary purpose of this document is to introduce LEAs to resources that support the implementation of the new *Arizona K-12 Computer Science Standards.* Whether integrating C.S. and computational thinking across the curriculum or adopting it as a

stand-alone course, there is a need to consider C.S. implementation within the K-12 system. As such, resources and guidance are outlined in the sections below that address the needs of the following stakeholders: school/LEA leadership; counselors and educators. An additional section includes considerations when adopting C.S. curricula and tools. In addition, to provide guidance regarding the new options for the Arizona Computer Science endorsement, the link to a one-page document that clearly outlines the requirements for *PreK-8 CS Endorsement* and *6-12 CS Endorsement* for Arizona educators can be found *here*.

# **Computer Science Webinars and Resources from Gilbert Public Schools**

If you are looking for way to integrate the Computer Science Standards into your classroom, here are some helpful resources! Shawn Abele, an educator from Gilbert Public Schools, has been providing webinars for the agency focused on Computer Science integration. She has also created these resources on the Practical Application of the Newly Adopted Computer Science Standards for Kindergarten | 1st Grade | 2nd Grade | 3rd Grade | 4th Grade | 5th Grade.